

LISTING OF CLAIMS:

The present listing of claims replaces all prior listings or versions of claims in the present application.

1. (Currently Amended) A vacuum thermal insulating valve ~~comprising:~~ characterized by that, with the vacuum thermal insulating valve formed by

(a) ~~a valve comprising~~ equipped with a valve body and an actuator; and

(b) a vacuum thermal insulating box ~~that~~ which houses ~~the~~ said valve, the afore-mentioned vacuum thermal insulating box comprises

i. a square-shaped lower vacuum jacket equipped with a cylinder-shaped vacuum thermal insulating pipe receiving part on ~~its~~ side and also with an upper face ~~that~~ which is made open; and

ii. a square-shaped upper vacuum jacket hermetically fitted to ~~the~~ said lower vacuum jacket from the above and ~~the~~ square-shaped upper vacuum jacket has also with a lower face ~~that~~ which is made open; and the

iii. a first jointed part is formed by bending ~~an~~ the inner wall and ~~an~~ the outer wall of ~~an~~ the upper end of the afore-mentioned lower vacuum jacket toward ~~an~~ the inside of the box in the shape of a brim, and also the jointed part is formed a second jointed part formed by bending ~~a~~ the center part of ~~a~~ the height direction of the side of ~~the~~ said lower vacuum jacket toward ~~an~~ the outside of the box in the shape of a brim, and further a ~~third~~ the jointed part is formed by bending ~~an~~ the inner wall and ~~an~~ the outer wall of ~~a~~ the lower end of the afore-mentioned upper vacuum jacket toward the outside of the box in the shape of a brim, and both vacuum jackets are connected ~~such~~ combined in the manner that ~~a~~ the vacuum thermal insulating side wall of the upper vacuum jacket is positioned toward ~~a~~ the vacuum thermal insulating side wall of

the ~~afore-mentioned lower vacuum jacket, and wherein the third~~ to make the jointed part of the lower end of the ~~afore-mentioned upper vacuum jacket and the second~~ jointed part of the outer wall-side of the lower vacuum jacket are hermetically ~~sealed~~~~contacted~~ by installing a first thermal insulating material layer, and a ~~fourth~~ ~~also~~ make the jointed part ~~of~~ formed by an the inner wall of ~~a~~ the ceiling part of the upper vacuum jacket and first jointed part of the upper end of the lower vacuum jacket is hermetically ~~sealed~~~~contacted~~ by installing a second thermal insulating material layer.

2. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1, ~~wherein this is so made that a valve is equipped with a valve unit-body~~ is a unit made by a plurality~~plural number~~ of valve bodies that are~~being~~ integrally connected.

3. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1, ~~wherein is so made that a heater is mounted on the a valve body and the said heater is made to be a plane heater~~ fixed~~fixed~~ to the valve body.

4. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 3, ~~wherein the plane heater is fixed to an outer surface of the is so constituted that a valve body to which outer surface a plane heater is fixed and the valve body further comprises an~~ with which inner part comprising a valve seat and a valve seat part are equipped.

5. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1, ~~wherein each is so made that a thermal insulating material layer comprises is of a silicon sponge.~~

6. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
~~wherein is so made that the~~ outer wall of the upper vacuum jacket is 2mm thick and ~~the~~
~~inner wall of the upper vacuum jacket~~ is 1.5mm thick, and the inner wall of the lower vacuum
jacket is 2mm thick and ~~at the lower part of the~~ outer wall of the lower vacuum jacket is
2mm thick and ~~at the upper part of the~~ side wall of the outer wall of the lower vacuum jacket
is 1.5mm thick, and ~~wherein the inner wall and outer wall of the upper vacuum jacket and the~~
~~inner wall and outer wall of the lower vacuum jacket~~ they are made of stainless steel.

7. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
~~wherein the is so constituted that a~~ vacuum thermal insulating pipe receiving part installed on
the side of the lower vacuum jacket is ~~made to be~~ a 50mm to ~150mm long cylinder-shaped
vacuum jacket made of a 2mm thick stainless steel plate, and O-rings made of the thermal
insulating material are placed on ~~at the~~ peripheral face of one end or both ends of ~~at the~~ tip part
of ~~at the~~ vacuum thermal insulating pipe ~~to be inserted into the~~ said vacuum thermal insulating
pipe receiving part from the outside, and the ~~above-mentioned~~ O-rings made of the thermal
insulating material are ~~disposed~~ ~~at~~ ~~the~~ between the vacuum thermal insulating pipe receiving
part and the tip part ~~of the vacuum thermal insulating pipe~~ thereof.

8. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
~~wherein is so constituted that the~~ second jointed parts and third jointed part, in the shape of a
brim, are disposed ~~at~~ ~~of the~~ side walls of the ~~lower~~ upper and ~~upper~~ lower vacuum jackets,
respectively, and ~~when~~ combined in an opposite direction are pressed into an appropriate
distance by a ~~plurality~~ plural number of press-clips ~~with an appropriate space~~.

9. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
~~wherein a is so made that the height of an~~ **the overlapped part** ~~that forms when the upper and~~
~~lower vacuum jackets are combined with the combination of the upper and lower vacuum~~
~~jackets which forms a~~ **the side wall of the vacuum thermal insulating box** ~~and~~ **is made to be**
more than 100mm.

10. (Currently Amended) A vacuum thermal insulating valve as claimed in Claim 1,
~~wherein an is so made that the inner wall face of the vacuum thermal insulating spaces of the~~
upper vacuum jacket and lower vacuum jackets ~~undergoes is performed the heat treatment~~
after plating.